



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,356	09/11/2001	Matthias Witschel	49828	4151

26474 7590 11/23/2005

NOVAK DRUCE DELUCA & QUIGG, LLP  
1300 EYE STREET NW  
SUITE 400 EAST  
WASHINGTON, DC 20005

EXAMINER

ANDERSON, REBECCA L

ART UNIT	PAPER NUMBER
----------	--------------

1626

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/936,356	<b>Applicant(s)</b> WITSCHER ET AL.	
	<b>Examiner</b> Rebecca L. Anderson	<b>Art Unit</b> 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-16,18-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7,9-11,13 and 18-21 is/are allowed.
- 6) ☒ Claim(s) 1,5,6,8,12,14-16 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet.</u>            |

Continuation of Attachment(s) 6). Other: Petition Decision dated 9/20/2005.

### **DETAILED ACTION**

Claims 1, 5-16, 18-21 and 23 are currently pending in the instant application. Claims 1, 5, 6, 8, 12, 14-16 and 23 are rejected and claims 7, 9-11, 13 and 18-21 appear allowable over the prior art of record.

As per the petition decision of 20 September 2005, the finality of the last office action mailed 2/16/2005 is withdrawn and previously withdrawn claims 18-21 have been searched and examined. The instant office action is made final as claims 18-21 appear allowable over the prior art of record.

### ***Election/Restrictions***

Applicant's petition filed under 37 CFR 1.144 on June 10, 2005 has been granted, see attached petition decision dated September 20, 2005. As per the petition decision, the examiner has considered all of the pending claims including the previously withdrawn claims 18-21.

### ***Response to Amendment and Arguments***

Applicant's arguments filed 10 June 2005 have been fully considered but they are not persuasive. Applicants' first argument and discussion is that the Examiner's position that Tseng's disclosure encompasses applicants' invention is in error because the compounds references in applicants' claims are clearly outside of the realm of the compounds which are addressed in the teaching of Tseng. However, it is noted that the examiner did not take the position that Tseng's disclosure is generic to applicants' invention but that TSANG et al. I generically encompasses positional isomers of the instantly claimed compounds. Furthermore all of the compounds within the generic

Art Unit: 1626

disclosure of Tseng are at least positionally isomeric to applicants' compounds..

Applicants' second argument and is that it is well settled that a prior art genus alone is not enough to establish a prima facie case of obviousness under section 103(a). This argument is not found persuasive because TSANG et al. discloses the compound of formula I which generically encompasses positional isomers of the instantly claimed compounds and provides preferences towards positional isomers of the instantly claimed compounds and provides schemes 17 and 19 which disclose methods of preparation for these compounds which have the discloses use as herbicidal formulation. Furthermore, preferences of preferred compounds (preference 1) wherein J is J-3, J-5, J-7, J-29 and J-30 include m as 0 (pages 7 and 10), as does preferences 5 and 6 (page 12). The motivation would be that it is expected that the further production of compounds similar in structure would have similar herbicidal properties, that the prior art provides preferences towards positional isomers of the instantly claimed compounds and that nothing unobvious is seen in substituting the known claimed isomer for the structurally similar isomer, as taught by TSANG et al., since such structurally related compounds suggest one another and would be expected to share common properties absent a showing of unexpected results. In re Norris, 84 USPQ 458 (1950).

***Maintained Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 6, 8, 12, 14-16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/19087 (TSENG et al.).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

The invention of the instant application claims tricyclic benzoylpyrazole compounds of the formula I wherein X is a bond, Y together with the two carbons to which it is attached forms a saturated, partially saturated or unsaturated 1,2-oxazole ring and R9 is the radical IIa (claim 1) wherein R1 and R2 can be hydrogen, R3 can be C1-C6 alkyl, R4 can be C1-C6 alkyl, R5 can be hydrogen and I can be 0 or 1 (claim 5) and wherein R10 can be hydroxyl, R11 can be C1-C6 alkyl and R12 can be hydrogen (claim 6 and 23). The instant application also claims a herbicidal composition of the compound as found in claim 1 (claim 14), its method of preparation (claim 15) and a method for controlling undesirable vegetation with the compound as found in claim 1 (claim 16). Processes for the preparation of the compounds of formula I as found in claim 1 by reaction with the compound of formula III wherein L1 is a nucleophilically replaceable leaving group are claimed in claim 8 and processes for the preparation of the compounds of formula I as found in claim 1 by reaction of a pyrazole of formula VII with an activated tricyclic benzoic acid of formula VI9 are claimed in claim 12.

***Determining the scope and contents of the prior art***

TSANG et al. discloses the herbicidal active (page 141, lines 25-26) compounds of the formula I as found on page 1, line 20 wherein Q can be Q-2 (page 1, lines 20-25 and is also preferred to be Q-2 (page 12, line 20, preference 5), J is as found on page 2, lines 1-5, m is 0, 1 or 2, n is 1 or 2 and p is 0, 1, or 2 (page 4, lines 5-10). Preferences towards the compound wherein Y together with the two carbons to which it is attached forms an unsaturated 1,2-oxazole ring is found on page 7 (compound J-9) wherein R18 can be hydrogen, C1-C6 alkyl, C1-C6 haloalkyl, etc. (page 11). Preferences towards compounds wherein X is CH<sub>2</sub> is found on page 161 in the Index Table C (compound #25). Preferences towards compounds wherein R1 and R2 can be H and C1-C3 alkyl, etc., R7 is H or C1-C6 alkyl and R8 is hydrogen (page 12, preference 6). Preferences for R6, when Q is Q-2, as OR14 and OH is found on page 23, lines 14-22, scheme 17. Herbicidal formulations of the compounds and methods of preparing are found on page 139, lines 1-20 and page 165, Test A. Page 141 discloses the method for controlling undesirable vegetation, lines 25-40. Page 23 discloses scheme 17 which is a method for the preparation of compounds of the formula Ie, wherein Q is Q-2 by reaction with a compound of the formula 18 wherein X<sub>2</sub> is chlorine and R14 can be H, C1-C6 alkyl, C1-C6 haloalkyl, etc. (page 3, line 35). Page 24 discloses scheme 19 wherein a compound of the formula 5, an activated tricyclid benzoid acid (page 16, lines 5-10) is reacted with the compound of formula 20, a pyrazole compound.

***Ascertaining the differences between the prior art and the claims at issue***

The difference between the prior art and the claims at issue is that the prior art generically encompasses and provides preferences towards positional isomers (i.e. the carbonyl moiety is in the para position in regards to X instead of the ortho position) of the instantly claimed compounds.

***Resolving the level of ordinary skill in the pertinent art***

However, minus a showing of unobvious results, it would have been obvious to one of ordinary skill in the art at the time of the invention to prepare the instantly claimed compounds, with the instantly claimed methods of claims 8 and 12 for use as herbicidal formulations when faced with the prior art of TSANG et al. which discloses the compound of formula I which generically encompasses positional isomers of the instantly claimed compounds and provides preferences towards positional isomers of the instantly claimed compounds and provides schemes 17 and 19 which disclose methods of preparation for these compounds which have the discloses use as herbicidal formulation. The motivation would be that it is expected that the further production of compounds similar in structure would have similar herbicidal properties, that the prior art provides preferences towards positional isomers of the instantly claimed compounds and that nothing unobvious is seen in substituting the known claimed isomer for the structurally similar isomer, as taught by TSANG et al., since such structurally related compounds suggest one another and would be expected to share common properties absent a showing of unexpected results. In re Norris, 84 USPQ 458 (1950).



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (571) 272-0696. Mrs. Anderson can normally be reached Monday through Friday 5:30AM to 2:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*RA*

Rebecca Anderson  
Patent Examiner  
Art Unit 1626, Group 1620  
Technology Center 1600

11/21/05

KAMAL A. SAEED, PH.D.  
PRIMARY EXAMINER

*for Kamal Saeed*

Joseph K. McKane  
Supervisory Patent Examiner  
Art Unit 1626, Group 1620  
Technology Center 1600



UNITED STATES PATENT AND TRADEMARK OFFICE

SEP 20 2005

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
www.uspto.gov

KEIL & WEINKAUF  
1101 CONNECTICUT AVENUE, NW  
WASHINGTON, DC 20036

In re Application of	:
Matthias Witschel et al	:
Serial No.: 09/936,356	: PETITION DECISION
Filed: September 11, 2001	:
Attorney Docket No.: 49828	:

This is in response to the petition under 37 CFR 1.144, filed June 10, 2005, requesting withdrawal of an improper restriction requirement.

BACKGROUND

A review of the file history shows that this application was filed under 35 U.S.C. 371 and accepted on September 11, 2001, and, as amended, contained claims 1-21. In a first Office action, mailed January 17, 2003, the examiner set forth a Lack of Unity requirement dividing the claims into at least 13 groups, as follows:

Group I – claims 1-7 and 14-17, drawn to products of formula I, where X=O and Y forms a pyridine;

Group II – claims 1-6, 8 and 12-17, drawn to products of formula I, where X=C and Y forms a pyrazole;

Group III - claims 1-6, 9 and 14-17, drawn to products of formula I, where X=S and Y forms an oxazole;

Group IV - claims 1-6, 10 and 14-17, drawn to products of formula I, where X= a bond and Y forms a thiazole;

Group V - claims 1-6, 11 and 14-17, drawn to products of formula I, where X=O and Y forms a pyrazine;

Group VI - claim 18, drawn to products of formula VI, where X=S and Y forms a pyridine;

Group VII - claim 18, drawn to products of formula VI, where X=O and Y forms a pyrazole;

Group VIII - claim 19, drawn to products of formula IX, where X=O and Y forms an oxazole;

Group IX - claim 19, drawn to products of formula VI, where X=S and Y forms a thiazole;

Group X - claim 20, drawn to products of formula XV, where X= C and Y forms a pyrazine;

Group XI - claim 20, drawn to products of formula XV, where X= a bond and Y forms a pyridine;

Group XII - claim 21, drawn to products of formula XVI, where X=O and Y forms a pyridine;

Group XIII - claim 21, drawn to products of formula XVI, where X=S and Y forms a pyrazole;

The examiner required applicants to elect a single invention as set forth in the enumerated groups or to identify another specific embodiment to which the claims would be restricted. The examiner stated that the groups lack a common special technical feature since the base tricyclic compounds vary in structure and ring atoms (i.e. Y forms one of the tricycle, rings as does X)

On February 10, 2003, applicants replied by amending the claims, canceling claim 17 and adding claims 22-23 and then elected the compounds identified in claim 22 and a species therewithin. The elected compounds did not fall within any of the above enumerated groups. Applicants traversed the holding on the basis that the special technical feature is not required to define over the prior art.

The examiner mailed a new Office action to applicants on December 31, 2003, maintaining the Lack of Unity requirement and replying to applicants' traversal by maintaining that the common special technical features argued by applicants are to significantly different compounds. The requirement was made Final. The examiner also rejected claims 1-6, 8, 12, 14-16 and 22-23 under 35 U.S.C. 103(a) as unpatentable over Tseng et al.

Applicants replied on June 30, 2004, canceling claims 2-4 and 22 and amending claims 1, 5, 11 and 23, again traversing the Lack of Unity requirement and arguing the rejection of record.

The examiner mailed a Final Office action to applicants on February 16, 2005, noting that applicants have amended the claims to include only the elected group, but continued the traversal with respect to intermediate compound claims 18-21. The examiner replied and maintained the finality of the holding. The examiner then rejected claims 1-6, 8, 12, 14-16 and 22-23 (sic 1, 5-6, 8, 12, 14-16 and 23) under 35 U.S.C. 103(a) as unpatentable over Tseng et al, as before., and made the action Final.

Applicants filed this petition and a reply to the Office action on June 10, 2005. A Notice of Appeal was filed on June 16, 2005.

## DISCUSSION

Applicants first argue that the initial Lack of Unity holding is in error because the PCT Rules and guidelines do not require that the special technical feature define a contribution over the art and that the reference relied on by the examiner fails to show the special technical feature which applicants rely on. Applicants state that the claims relate to compounds and intermediates for their preparation and rely on the tricyclic structure of a benzene ring fused to a five member

unsaturated ring which is fused to a variable sized ring which may be heterocyclic and saturated or unsaturated. Applicants also argue that the structures of formulas XVI, XV, IX and VI are intermediates to the final product, but all contain the tricyclic structure. Applicants request that the claims as presently pending be considered to have Unity and that withdrawn claims 18-21, drawn to intermediates be rejoined for examination purposes.

As applicants request review with respect to only presently pending claims which have been amended to a limited structure, review with respect to the original requirement as pertaining to other Groups, the claims to which have been canceled, will not be made.

A review of the pending claims shows that claims 1, 5 and 6 are directed to a benzopyrazole structure of formula I where X is a bond and Y forms an oxazole ring. Claims 7-13 are to various processes of preparing the compound of claim 1 using various precursors reacted with a tricyclic benzoic acid. Claim 14 is to the composition as a herbicide and claim 15 to the herbicide preparation and claim 16 to controlling unwanted vegetation with the herbicide. Withdrawn claims 18-21 are to tricyclic benzoic acid or benzene or cyano or aniline precursors all of which contain the tricyclic structure of claim 1 on which Unity for all other claims is based. These structures lack only R<sup>9</sup> which is the pyrazole bonded to the basic tricyclic structure in the place of the acid, cyano or amino function. As the examiner based the original Lack of Unity requirement on the tricyclic structure and not on variable R<sup>9</sup>, the intermediate compounds are found to contain all of the requirements set forth by the examiner for the special technical feature on which Unity was based. These claims, under PCT Rules and guidelines, are to be examined with the product claims since the intermediate contains all of the special technical features of the final product.

#### DECISION

The petition is **GRANTED**.

The application will be forwarded to the examiner for consideration of all claims pending including withdrawn claims 18-21.

In view of the above decision, the Finality of the last Office action is withdrawn as the Office action is incomplete. Therefor, applicants' Notice of Appeal is premature and is held in abeyance until a proper Final Office action ensues and applicants choose to pursue a proper Appeal. A new Notice of Appeal will not require a fee unless applicants, in view of the above decision, request refund of the Appeal Fee paid.

Should there be any questions about this decision please contact William R. Dixon, Jr., by letter addressed to Director, TC 1600, at the address listed above, or by telephone at 703-308-3824 or by facsimile sent to the general Office facsimile number, 571-273-8300

  
George C. Elliott  
Director, Technology Center 1600